PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/4			
International application No.	International filing date (day/n	nonth/year)	Priority date (day/month/year)		
PCT/US04/05602	26 February 2004 (26.02.2004)	26 February 2003 (26.02.2003)		
International Patent Classification (IPC) of	or national classification and IPC				
IPC: A61F 13/00(2006.01),13/02(2 USPC: 424/448,449	006.01); A61L 15/16 (2006.01);	A61K 9/70(2006.0	1)		
Applicant					
LA VIPHARM S.A.					
•	ary examination report has be stransmitted to the applicant				
2. This REPORT consists of a	a total of ٌ sheets, includin	g this cover sheet.			
which have been amen	nded and are the basis for this see Rule 70.16 and Section 6	report and/or she	scription, claims and/or drawings ets containing rectifications made strative Instructions under the PCT).		
3. This report contains indicate	tions relating to the following	g items:			
I Basis of the repo	ort		•		
II Priority					
III Non-establishme	ent of report with regard to no	ovelty, inventive s	tep and industrial applicability		
IV Lack of unity of	invention				
V Reasoned statem	nent under Article 35(2) with	regard to novelty.	inventive step or industrial		
	ations and explanations supp	-	,		
VI Certain documen	its cited				
VII Certain defects in	n the international application	า			
VIII Certain observati	ions on the international appl	ication			
Date of submission of the demand		Date of completion of this report			
26 January 2005 (26.01.2005)		May 2008 (20.05.20	08)		
Name and mailing address of the IPEA/US Mail Stop PCT, Atm: IPEA/ US		horized officer	4000		
Commissioner for Patents P.O. Box 1450		chael Woodward	7. Roberts for		
Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	i i	phone No. 571-27	V		
	m PCT/IPEA/409 (cover sheet)/July 1998)				

International application No.	
PCT/US04/05602	

I.	Basis of the report
1.	With regard to the elements of the international application:*
	the international application as originally filed.
	the description:
	pages 1-23 as originally filed
	pages NONE , filed with the demand pages NONE , filed with the letter of
	K7
	the claims:
	pages <u>24-33</u> , as originally filed pages <u>NONE</u> , as amended (together with any statement) under Article 19
	pages NONE , filed with the demand
	pages NONE , filed with the letter of
	the drawings:
	pages 1-5, as originally filed
	pages NONE , filed with the demand pages NONE , filed with the letter of
	the sequence listing part of the description: pages NONE, as originally filed
	pages NONE , as originary fried pages NONE , filed with the demand
	pages NONE, filed with the letter of
2.	With regard to the language, all the elements marked above were available or furnished to this Authority in the
	language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language which is:
	the language of a translation furnished for the purposes of international search (under Rule23.1(b)).
	the language of publication of the international application (under Rule 48.3(b)).
	the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/or 55.3).
3.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
	contained in the international application in printed form.
	filed together with the international application in computer readable form.
	furnished subsequently to this Authority in written form.
	furnished subsequently to this Authority in computer readable form.
	The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
	The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
4.	The amendments have resulted in the cancellation of:
	the description, pages <u>NONE</u>
	the claims, Nos. <u>NONE</u>
	the drawings, sheets/fig NONE
5.	This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
his	eplacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). Iny replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.
	·

Form PCT/IPEA/409 (Box I) (July 1998)

International application No.
PCT/US04/05602

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
The question whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been and will not be examined in respect of:					
the entire international application,					
claims Nos. 37, 58 and 70-81					
because:					
the said international application, or the said claim Nos relate to the following subject matter which does not require international preliminary examination (specify):					
the description, claims or drawings (indicate particular elements below) or said claims Nos. 58 are so unclear that no meaningful opinion could be formed (specify):					
Please See Continuation Sheet					
the claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion could be formed.					
no international search report has been established for said claims Nos. 37 and 70-81					
 A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions: 					
the written form has not been furnished or does not comply with the standard.					
the computer readable form has not been furnished or does not comply with the standard.					

Form PCT/IPEA/409 (Box III) (July 1998)

International application No. PCT/US04/05602

STATEMENT			
Novelty (N)	Claims	Please See Continuation Sheet	YE
	Claims	Please See Continuation Sheet	NO
· Inventive Step (IS)	Claims	Please See Continuation Sheet	YE
· · · · · · · · · · · · · · · · · · ·		Please See Continuation Sheet	NC
Industrial Applicability (IA)		Please See Continuation Sheet Please See Continuation Sheet	YE NO
	Ciaims	Prease See Continuation Sheet	
CITATIONS AND EXPLANATIONS ase See Continuation Sheet			
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)				
International application No.	International filing date (day/mo	onth/year) Priority date (day/month/year)				
PCT/US04/05602	26 February 2004 (26.02.2004)	26 February 2003 (26.02.2003)				
International Patent Classification (IPC) o	International Patent Classification (IPC) or national classification and IPC					
USPC: 424/448,449	006.01);A61L 15/16(2006.01);A6	61K 9/70(2006.01)				
Applicant						
LA VIPHARM S.A.						
Examining Authority and is	s transmitted to the applicant a	•				
2. This REPORT consists of a	a total of $\underline{\underline{\mathbf{S}}}$ sheets, including	this cover sheet.				
which have been amen	ded and are the basis for this resee Rule 70.16 and Section 607	sheets of the description, claims and/or drawings eport and/or sheets containing rectifications made 7 of the Administrative Instructions under the PCT).				
3. This report contains indicat	tions relating to the following i	items:				
I Basis of the repo	ort					
II Priority		•				
III Non-establishme	ent of report with regard to nov	velty, inventive step and industrial applicability				
IV Lack of unity of						
		egard to novelty, inventive step or industrial				
	ations and explanations suppor					
VI Certain documen	ts cited					
VII Certain defects in	n the international application					
=	ons on the international applic	ation				
V_V Origin costs and in the international appropriation						
Date of submission of the demand	Date	of completion of this report				
26 January 2005 (26.01.2005)	20 M	ay 2008 (20.05.2008)				
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/ US		prized officer				
Commissioner for Patents P.O. Box 1450		ael Woodward A. Roberts for				
Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		hone No. 571-272-1600				
DOMESTIC (371) 273-3201						

Form PCT/IPEA/409 (cover sheet)(July 1998)

International application No.	
PCT/US04/05602	

I.	Basi	s of the report
ı.	With	regard to the elements of the international application:*
	\boxtimes	the international application as originally filed.
	X	the description:
		pages 1-23 as originally filed
		pages NONE, filed with the demand pages NONE, filed with the letter of
		the claims: pages 24-33 as originally filed
		pages NONE, as amended (together with any statement) under Article 19
		pages NONE, filed with the demand
		pages NONE, filed with the letter of
	\boxtimes	the drawings:
		pages 1-5 as originally filed pages NONE , filed with the demand
		pages NONE, filed with the letter of
	\Box	the sequence listing part of the description:
	لسيا	pages NONE , as originally filed
		pages NONE, filed with the demand
_	*****	pages NONE , filed with the letter of
2.	With	regard to the language, all the elements marked above were available or furnished to this Authority in the tage in which the international application was filed, unless otherwise indicated under this item.
		e elements were available or furnished to this Authority in the following language which is:
	\Box	the language of a translation furnished for the purposes of international search (under Rule23.1(b)).
	Ħ	the language of publication of the international application (under Rule 48.3(b)).
		the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).
3.		regard to any nucleotide and/or amino acid sequence disclosed in the international application, the national preliminary examination was carried out on the basis of the sequence listing:
	H	contained in the international application in printed form.
	님	filed together with the international application in computer readable form.
	H	furnished subsequently to this Authority in written form.
	H	furnished subsequently to this Authority in computer readable form.
		The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
		The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
4.		The amendments have resulted in the cancellation of:
		the description, pages NONE
		the claims, Nos. NONE
		the drawings, sheets/fig NONE
5.		This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
* }	Replac	ement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in
this **	repoi	t as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). placement sheet containing such amendments must be referred to under item 1 and annexed to this report.
		y
		MDF 4 (400 (Play I) (July 1009)

Form PCT/IPEA/409 (Box I) (July 1998)

International application No.

PCT/US04/05602

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
1. The question whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been and will not be examined in respect of:						
the	e entire international application,					
⊠ cla	aims Nos. <u>37, 58 and 70-81</u>					
becausė:						
	e said international application, or the said claim Nos relate to the following subject matter which does at require international preliminary examination (specify):					
	•					
	·					
	e description, claims or drawings (indicate particular elements below) or said claims Nos. 58 are so unclear that meaningful opinion could be formed (specify):					
	Continuation Sheet					
	·					
	•					
	claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion ald be formed.					
No no	international search report has been established for said claims Nos. 37 and 70-81					
2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:						
	written form has not been furnished or does not comply with the standard.					
the	computer readable form has not been furnished or does not comply with the standard.					
DOTABLE	A (400 (Day III) (July 1009)					

International application No. PCT/US04/05602

STATEMENT				
Novelty (N)	Claims	Please See Continuation Sheet		YE
	Claims	Please See Continuation Sheet		NC
· Inventive Step (IS)	Claims	Please See Continuation Sheet		YE
		Please See Continuation Sheet		NO
Industrial Applicability (IA)	Claims	Please See Continuation Sheet		YE
•	Claims	Please See Continuation Sheet		NC
CITATIONS AND EXPLANATIONS ase See Continuation Sheet				
		•		
·		•		
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International application No.

PCT/US04/05602

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

Claim 6 is objected to as lacking clarity under PCT Rule 66.2(a)(v) because the claim 6 is not fully supported by the description

The application, as originally filed, did not describe: the step of attaching a second release liner occurs before the step of attaching the barrier layer.

Claims 30, 31 and 50 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claim is indefinite for the following reason(s):

The term "high specific" in claim 30 is a relative term which renders the claim indefinite. The term "high specific" is not defined by the claim, the description does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what applicant considers a high specific surface area to be. Please clarify.

Claim 31 is indefinite due to its dependency.

Claim 58 is objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claim is indefinite for the following reason(s):

With respect to claim 58, independent claim 38 recites the first release liner is in "direct contact" with the active layer, covering a side of the active layer, and claims 56 and 57 recite a barrier layer is attached to the active layer with an adhesive, where the barrier layer is disposed on an opposite side of the active layer from the first release liner. From this claim language, it appears the active layer is sandwiched between a first release liner and a barrier layer. However, claim 58 recites the first release liner is attached to the barrier layer. From the claim language, it appears the layering is active layer - adhesive - barrier layer - release liner. If this is the situation, it is unclear how the first active release liner is in "direct contact" with the active layer, as recited in claim 38, if it is attached to the barrier layer. Please clarify. The scope of the claim is so unclear that it cannot be treated on the merits.

Form PCT/IPEA/409 (Box VIII) (July 1998)

International application No. PCT/US04/05602

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(To be used when the space in any of the preceding boxes is not sufficient)

Section III. Non-establishment of report (description/claims/drawings unclear)

Claim 58 is objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claim is indefinite for the following reason(s):

Claims 38 recites the first release liner is in "direct contact" with the active layer, covering a side of the active layer, and claims .56 and 57 recite a barrier layer is attached to the active layer with an adhesive, where the barrier layer is disposed on an opposite side of the active layer from the first release liner. From this claim language, it appears the active layer is sandwiched between a first release liner and a barrier layer. However, claim 58 recites the first release liner is attached to the barrier layer. From the claim language, it appears the layering is active layer - adhesive - barrier layer - release liner. If this is the situation, it is unclear how the first active release liner is in "direct contact" with the active layer, as recited in claim 38, if it is attached to the barrier layer. Please clarify. The scope of the claim is so unclear that it cannot be treated on the merits.

V.1 Reasoned Statements

The opinion as to Novelty was positive (Yes)with respect to claims 5-18, 21, 25, 30, 31, 35, 41, 45, 50, 54 and 60-67 The opinion as to Novelty was negative (No) with respect to claims 1-4, 19, 20, 22-24, 26-29, 32-34, 36, 38-40, 42-44, 46-49, 51-53, 55-57, 59, 68 and 69

The opinion as to Inventive Step was positive (Yes) with respect to claims 6-18, 30, 31, 50 and 60-66

The opinion as to Inventive Step was negative(NO) with respect to claims 1-5, 19-29, 32-34-36, 38-44, 46-49, 51-57, 59 and 67-69

The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-36, 38-57 and 59-69

The opinion as to Industrial Applicability was negative(NO) with respect to claims NONE

V. 2. Citations and Explanations:

Claims 1, 2, 4, 19, 20, 23, 24, 32-34, 38-40, 43 and 44 lack novelty under PCT Article 33(2) as being anticipated by Ebert et al. (US 5,626,866)

With respect to claim 1, Ebert et al. discloses a method for making an active layer to deliver a volatile substance, the method comprising providing a polymer solution including a polymer, a solvent, and the volatile substance, applying the polymer solution to a side of a first release liner, and drying the polymer solution to create the active layer (Examples 2 and 6)

With respect to claim 2, Ebert et al. discloses positioning a barrier layer (backing layer) disposed on an opposite side of the active layer from the first release liner.

With respect to claim 4, Ebert et al. discloses using the method of making an active layer in formulating nicotine-containing patches (abstract).

With respect to claims 19, 20, 39 and 40, Ebert et al. discloses the polymer solution is a polyurethane (col.8, lines 52-66).

With respect to claims 23, 24, 43 and 44, Ebert et al. discloses the inclusion of a thickener (HPC) (Example 6).

With respect to claims 32-34 and 51-53, Ebert et al. discloses the active layer is a rate controlling active layer that includes a rate controlling composition that controls the rate of delivery of the volatile substance, and the rate controlling composition includes another polymer (ethylenevinyl acetate copolymer) (col. 8, lines 30-66).

With respect to claim 38, Ebert et al. discloses in Fig. 1, a device for delivering a volatile substance comprising an active layer (18), the active layer being a dried polymer solution having the volatile substance, and a first release liner (22) in direct contact with the active layer, and covering a side of the active layer.

Claims 21, 25, 35, 41, 45 and 54 lack an inventive step under PCT Article 33(3) as being obvious over Ebert et al.

With respect to claims 21 and 41, Ebert et al. addresses all the limitations of claims 20 and 40, however fails to expressly

Form PCT/IPEA/409 (Continuation Sheet) (July 1998)

International application No. PCT/US04/05602

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

disclose the type of polyurethane used. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the type of polyurethane used, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With respect to claims 25 and 45, Ebert et al. addresses all the limitations of claims 23 and 43, however fails to expressly disclose using the claimed thickeners. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the type of thickener used, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With respect to claims 35 and 54, Ebert et al. addresses all the limitations of claims 32 and 51, however fails to expressly disclose using the claimed materials in the rate controlling composition. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the materials used in the rate controlling composition, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 1-4, 22, 26-29, 32-34, 36, 38, 42, 46-49, 51-53, 55-57, 59, 68 and 69 lack novelty under PCT Article 33(2) as being anticipated by DiSapio et al. (US 4,874,129).

With respect to claim 1, DiSapio et al. discloses in Figs. 1 and 7, a method for making an active layer to deliver a volatile substance, the method comprising providing a polymer solution including a polymer, a solvent, and the volatile substance (perfume), applying the polymer solution to a side of a first release liner (10C), and drying the polymer solution to create the active layer (col. 6, lines 18-26; col. 13, lines 1-3).

With respect to claims 2, 4 and 69, DiSapio et al. discloses positioning a barrier layer (10A) disposed on an opposite side of the active layer from the first release liner.

With respect to claim 3, DiSapio et al. discloses in Fig. 7, attaching the barrier layer (70A) to the opposite side of the active layer (70B) from the first release liner (70C) by a first adhesive layer (70D).

With respect to claims 22 and 42, DiSapio et al. discloses the volatile substance is a perfume (col. 6, lines 10-13).

With respect to claims 26-28 and 46-48, DiSapio et al. discloses the polymer solution comprises glycol (col. 6, lines 63-65).

With respect to claim 29, and 49, DiSapio et al. discloses the active layer is a solid (pressure sensitive adhesive) (col. 6, lines 18-19).

With respect to claims 32-34, 36, 51-53 and 55, DiSapio et al. discloses the active layer is a rate controlling active layer that includes a rate controlling composition that controls the rate of delivery of the volatile substance, wherein the rate controlling composition includes polyester (Mylar backing) (col. 13, lines 1-2, 35).

With respect to claim 38, DiSapio et al. discloses in Figs. 1 and 7, a device for delivering a volatile substance comprising an active layer (10B), the active layer being a dried polymer solution having the volatile substance, and a first release liner (10C) in direct contact with the active layer, and covering a side of the active layer.

With respect to claim 56, DiSapio et al. discloses in Fig. 1, a barrier layer (10A) disposed on an opposite side of the active layer from the first release liner.

With respect to claim 57 and 59, DiSapio et al. discloses in Fig. 7, a barrier layer (10A) disposed on an opposite side of the active layer from the first release liner, wherein the barrier layer is attached to the active layer with an adhesive (7D).

With respect to claim 68, Fig. 7 illustrates the active layer is attached to an adhesive, thereby having an adhesive property.

Claims 5 and 67 lacks an inventive step under PCT Article 33(3) as being obvious over DiSapio in view of Fischel-Ghodsian. With respect to claim 67, DiSapio et al. addresses all the limitations of claims 38 and 56, however fails to expressly disclose a second release liner attached to an opposite side of the barrier layer from the active layer. Fischel-Ghodsian teaches using a second release liner on an opposite side of a barrier layer from the active layer (col. 9, lines 46-50). It would have been obvious to one of ordinary skill in the art to include a second release liner for packaging and storage purposes, as taught by Fischel-Ghodsian.

Claims 35 and 54 lack an inventive step under PCT Article 33(3) as being obvious over DiSapio et al.

With respect to claims 35 and 54, DiSapio et al. addresses all the limitations of claims 32 and 51, however fails to expressly disclose using the claimed materials in the rate controlling composition. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the materials used in the rate controlling composition, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claim 6 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the step of attaching a second release liner occurs before the step of attaching the barrier layer.

Claim 7 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the barrier layer is a double coated tape, each side of the double coated tape covered by an adhesive layer, and wherein position includes attaching

International application No. PCT/US04/05602

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

the double coated tape to the opposite side of the active layer from the first release liner by one of the adhesive layers of the double coated tape.

Claims 8-18 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest applying a fractional adhesion layer to an opposite side of the barrier layer from the active layer.

Claims 30 and 31 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the polymer solution is applied to create a surface with a high specific surface area.

Claim 50 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a side of the active layer adjacent the first release liner has a higher specific surface area than a smooth surface.

Claims 60-66 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a mask layer covering at least a portion of the barrier layer, and adhesive adjacent to an opposite side of the mask layer from the barrier layer, the adhesive covering an area that is only a fraction of a total area of a side of the barrier layer.

Claims 1-36, 38-57 and 59-69 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in cosmetic industry.

NEW CITATIONS

US 5,626,866 A (EBERT et al) 06 May 1997 (06.05.1997), Examples 2, 6; abstract; col. 8, lines 30-66; Fig. 1.

US 4,874,129 (DISAPIO et al) 17 October 1989 (17.10.1997), col. 6, lines 10-13, 18-26, 63-65; col. 13, lines 1-3, 35; Figs. 1 and 7.

US 5,071,704 (FISCHEL-GHODSIAN) 10 December 1991 (10.12.1991), col. 9, lines 46-50.